

Module 1

**Identifying investments
that require FAIR and
safeguarded data**

Checklist

Identifying investments that require FAIR and safeguarded data: a checklist

This checklist will help Bill & Melinda Gates Foundation grantees and program officers to identify investments likely to involve or require the collection, access, use or sharing of data.

Ticking yes to one or more activities indicates the collection, reuse, use or sharing of data is involved in delivering the programme of work, and should trigger the request of further information on plans to manage this. The Data Sharing Toolkit provides learning, guides and tools to help Program Officers and grantees to ensure data is FAIR and managed in a way that minimises harmful impacts.

What types of investment are likely to require FAIR and safeguarded data?

There are a number of common activities within investments funded by the Foundation's 'Digital Farming Services' portfolio that rely on the collection, access, use or sharing of data.

The activities can be grouped into five themes:

1. **Collecting new data or information** – new data sets being created for a specified purpose.
2. **Stakeholder collaboration** – collaboration between actors often relies on the ability to share data and information.
3. **Developing digital services** – creating services or applications from data derived from one or multiple sources.
4. **Providing farm level insights** – improving decision-making using high quality data and evidence that can be trusted and reused.
5. **Sharing or publishing data** – focusing on improving sharing of data or research.

Further examples within each theme are provided below.

Checklist: identifying investments that require FAIR and safeguarded data

Theme	Does the investment propose the following activity?	Yes	No
Collecting data	<p>Collecting or creating new data.</p> <p>The grantee proposes to collect or create new data for a specified purpose. It is likely that certain actors or groups will need to access, use and share the data during or after the lifetime of the grant.</p>		
Stakeholder collaboration	<p>Bringing together data and information from multiple sources.</p> <p>The investment includes a need to gather together data and information on a particular topic or location to address a particular challenge. For example by bringing together data from governments, private companies and research institutions.</p>		
	<p>Multiple actors accessing and using content.</p> <p>The grantee works in an ecosystem of actors requiring access to the same content – for example, this could be to carry out research, define public or private sector interventions or drive innovation.</p>		
	<p>Private and public sector collaboration.</p> <p>The success of the investment is dependent on bringing together actors from the private and public sector. The grantee has a need to gather data and information on a particular topic or location to address a particular challenge and make this available to stakeholders in both the public and private sector.</p>		
Digital services	<p>Development of insights, services, applications or products from data.</p> <p>The grantee proposes to create services or applications from data derived from one or multiple sources and transformed in some way. The right licence is required for proper use of data in this way.</p>		
	<p>Developing or using a digital platform or new technology.</p> <p>The grantee proposes to create a digital platform. This could have multiple purposes, for example to host or signpost data as part of an evidence base or for analytics. Often digital platforms will have data from multiple sources, with multiple users needing to access and use the data or insights hosted on the platform.</p>		
	<p>Development of predictive models.</p> <p>The investment intends to use models to analyse, control, visualise and predict complex processes. Models have a range of applications in agriculture, including predicting crop volumes based on fertilizer and pesticide use, predicting profit and loss, and analysing yields. Often models will bring data from multiple sources together to generate outputs.</p>		

Theme	Does the investment propose the following activity?	Yes	No
Farm level insights	<p>Access to farmer and farm information.</p> <p>To improve farm-level decisions through digitally-enabled services, the investment proposes either to provide insights at farm-level, and/or require a log in, all of which are likely to include access to personal or sensitive data.</p>		
	<p>Using GPS or adding geographical coordinates or locations.</p> <p>The grantee proposes to use maps or add information to maps, such as population, administrative boundaries, farm locations or the location of pests. Note that not all basemaps or mapping apps permit use in this way.</p>		
	<p>Accessing, using or sharing surveillance data.</p> <p>The investment proposes to collect or access data from surveillance activities, for example, identifying the presence of human disease like malaria, or providing insight into what's happening in farmers fields through crops types, pest or pathogen presence or the weather.</p>		
Data sharing/ Publication	<p>Publishing or sharing data or research.</p> <p>The investment plans to share data either with a specific group via a platform, or published openly via an open access repository . For example sharing crop variety, environmental surveillance or soil data through a soil information system or via the Gates Open Access portal.</p>		

Data Sharing Toolkit



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